## THE ABORTION PROBLEM\*

A REVIEW OF THE ABORTION CASES AT THE HIGHLAND HOSPITAL

## By Clarence A. DePuy, M. D., Oakland

TAUSSIG, in a paper prepared for the White House Conference on Prenatal and Maternal Care, called attention to the significance of the abortion problem and stated that out of every 1,000,000 human beings conceived, 300,000 to 400,000 perish in the first six months of intrauterine life. In Poland the ratio was one abortion to three confinements; in France, about one abortion to one confinement; small towns of Russia, about one to four; Moscow, about seventy to one hundred; Leningrad, one to 0.7. The textbooks on obstetrics give a very low rate of abortions to confinements, about one to four.

## HIGHLAND HOSPITAL OF OAKLAND STATISTICS

In a review of the abortion cases that have been treated at Highland Hospital of Oakland since 1927, I wish to report some interesting facts on the incidence of abortion in relation to term pregnancies, the low percentage of cases which had positive Wassermanns, the high temperatures, and blood counts, and the results obtained. The term "abortion" as here used, means the interruption of pregnancy before the twenty-eighth week.

Nine hundred and seventy-six cases have been studied and the reports are as follows: The average age of the patients was 27.3 years; 848 were married, eighty-four were separated and forty-four were single. There were 2694 previous pregnancies and seventy-seven not stated, 867 previous abortions and seventy-one not stated. Adding the 976 cases to the previous 2694 pregnancies and 867 previous abortions, the sums are 3670 pregnancies and 1843 abortions; an incidence of 50.2 per cent abortions.

The average duration of pregnancy was 2.5 months. The average duration of symptoms on entry to the hospital was 8.7 days.

The diagnosis on admission was 779 incomplete abortions and 164 threatened.

The treatment was rest in bed, with the head of the bed elevated, excepting cases which were bleeding profusely; and observation. High temperature and high blood counts promptly subsided and were considered contraindications to surgery. When the hemorrhage was profuse, a number of patients were taken to the treatment room and under aseptic precautions, the products of conception were removed from the cervix with forceps. After the acute symptoms had subsided and the case was considered incomplete, the patient was sent to surgery, the cervix dilated and the uterus evacuated; 359 cases, or 36.7 per cent, had dilatations and evacuation. In many of these patients the abortion would have been completed

spontaneously, but to save hospital days surgical interference was resorted to.

The cause of the abortion in many cases was hard to determine; 566, or 58 per cent, were given as spontaneous; 340, or 34.8 per cent, were induced, and 70, or 7.2 per cent, not stated.

The total hospital days for the 976 patients was 8929, an average of 9.1 days.

The average maximum temperature was 100.5; 202 patients had albumen in the urine. The average maximum blood count was 12,830; the average hemoglobin was 60.7 per cent.

The small number of positive Wassermanns is interesting; two patients had one plus, six patients two plus, two patients three plus, and fourteen patients four plus, making a total of twentyfour patients with positive Wassermanns, approximately 3 per cent. These twenty-four patients had 131 pregnancies and sixty-three abortions, a ratio of 48 per cent. One patient, D-9650, had twenty-three pregnancies and twenty abortions, the last one was induced; the cause of the others was not stated. If this case could be eliminated, it would greatly reduce the ratio of abortions to term pregnancies. In twelve of the twenty-four patients the abortions were spontaneous; ten abortions were induced by the patients or others, and two were not stated. Three abortions were averted, twenty were complete and one not stated on discharge. A total of 801 patients had negative Wassermanns, and in 151 patients, the reports were not recorded.

The results were as follows: 112 patients were discharged with the abortion averted; in 778 the abortion was complete; and thirty-eight patients, on account of various causes, left the hospital before treatment was complete.

There were twelve deaths, or 1.2 per cent, in six of which the cause of the abortion was given as spontaneous; five were induced and one not stated. The causes of death were as follows: Three had peritonitis, two were due to hemorrhage, three had septicemia, two died of bronchopneumonia, and two not stated.

## SUMMARY

- 1. A total of 976 patients had 3670 pregnancies and 1843 of these pregnancies were interrupted by abortion; an incidence of 50.2 per cent.
- 2. A total of 359 patients, or 36.7 per cent had dilatation and evacuation.
- 3. High temperature and high blood counts do not mean infection and are contraindications to surgery. The average maximum temperature was 100.5; the average blood count was 12,830.
- 4. Lues, as a cause of abortion, is rather uncommon; only twenty-four patients, approximately 3 per cent, had positive Wassermanns; and of these, many were induced.
- 5. The mortality was small considering that many of these patients were sent to the hospital with serious symptoms. There were only twelve deaths, a mortality of 1.2 per cent.

230 Grand Avenue.

<sup>\*</sup> Chairman's Address—Obstetrics and Gynecology Section of the California Medical Association at the sixty-first annual session, Pasadena, May 2-5, 1932.